

WHAT IS CLAIMED IS:

1. An overtemperature detection device for detecting an overtemperature condition of each of adjacently arranged power components, each of which has a plurality of sides, comprising:

temperature detection components; and
an overtemperature detection circuit, wherein
at least two temperature detection components are
disposed adjacent to each power component,

a first temperature detection component of the two
temperature detection components is placed adjacent to any one
of the sides of the power component,

a second temperature detection component of the two
temperature detection components is placed adjacent to another
side of the power component, and

the overtemperature detection circuit detects the
overtemperature condition of the power components based on
temperature detection signals outputted from at least two of
the temperature detection components.

2. The overtemperature detection device according to claim 1,
wherein:

one temperature detection component is disposed between
two adjacent power components; and

the temperature detection component detection components
is used for detecting the overtemperature condition of the two
adjacent power components.

3. The overtemperature detection device according to claim 2, wherein the temperature detection component is disposed at a midpoint between the two adjacent power components.

4. The overtemperature detection device according to claim 1, wherein the temperature detection components are used exclusively for the overtemperature detection of the power component, adjacent to which the temperature detection components are disposed.

5. The overtemperature detection device according to claim 1, wherein the overtemperature detection circuit determines the overtemperature condition of the power component when temperature detection signals outputted from the temperature detection components disposed adjacent to the power component exceed a threshold.

6. The overtemperature detection device according to claim 5, wherein the threshold is set at different values in a case that the overtemperature condition has been detected and in a case that the overtemperature condition has not been detected.

7. The overtemperature detection device according to claim 1, further comprising an overtemperature protection circuit for controlling power supply to the power component while the overtemperature condition continues to be detected by the overtemperature detection circuit.

8. A semiconductor integrated circuit device comprising:

- a semiconductor circuit board;
- a plurality of power components arranged adjacent to each other on the semiconductor circuit board;
- temperature detection components; and
- an overtemperature detection circuit, wherein
 - at least two temperature detection components are disposed adjacent to each power component,
 - a first temperature detection component of the two temperature detection components is placed adjacent to any one of the sides of the power component,
 - a second temperature detection component of the two temperature detection components is placed adjacent to another side of the power component, and
 - the overtemperature detection circuit detects the overtemperature condition of the power components based on temperature detection signals outputted from at least two of the temperature detection components.